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fluorinated gas, [in combination with] and bearing a targeting ligand, wherein said targeting ligand is covalently bound to said lipid vesicles via a hydrophilic polymer linking group. said targeting ligand targets cells or receptors selected from the group consisting of myocardial cells, endothelial cells, epithelial cells, tumor cells and the glycoprotein GPIIb/IIIa receptor and said fluorinated gas is selected from the group consisting of perfluorocarbons and sulfur hexafluoride.

✓
Cancel Claim 101, without prejudice.

C2

102. (Amended) A formulation according to Claim ~~[101]~~ 100 wherein said lipid vesicles are selected from the group consisting of micelles and liposomes.

C3

113. (Amended) A process for the preparation of a formulation for diagnostic or therapeutic use which comprises, in combination with a bioactive agent, lipid[, polymer or protein] vesicles encapsulating a fluorinated gas, in combination with a targeting ligand, wherein the process comprises combining together said bioactive agent, lipid, [protein or polymer,] fluorinated gas and targeting ligand, wherein said targeting ligand [targets cells or receptors selected from the group consisting of myocardial cells, endothelial cells, epithelial cells, tumor cells and the glycoprotein GPIIb/IIIa receptor] comprises the sequence Lys-Gln-Ala-Gly-Asp-Val (SEQ ID NO 1), and said fluorinated gas is selected from the group consisting of perfluorocarbons and sulfur hexafluoride.

✓
Cancel Claim 114, without prejudice.

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C4 115. (Amended) A process according to Claim [114] 113 wherein said [lipids] lipid vesicles are selected from the group consisting of liposomes and micelles.

C5 122. (Amended) A targeted formulation for diagnostic or therapeutic use comprising, in combination with a bioactive agent, lipid[, polymer or protein] vesicles encapsulating a fluorinated gas, in combination with a targeting ligand, wherein the formulation is prepared by a process which comprises combining together said bioactive agent, lipid, [protein or polymer,] fluorinated gas and targeting ligand, wherein said targeting ligand [targets cells or receptors selected from the group consisting of myocardial cells, endothelial cells, epithelial cells, tumor cells and the glycoprotein GPIIb/IIIa receptor] comprises the sequence Lys-Gln-Ala-Gly-Asp-Val (SEQ ID NO 1), and said fluorinated gas is selected from the group consisting of perfluorocarbons and sulfur hexafluoride.

✓
Cancel Claim 123, without prejudice.

C6 124. (Amended) A targeted formulation according to Claim [123] 122 wherein said lipid vesicles are selected from the group consisting of liposomes and micelles.

C7 Sall
F2 127. (Amended) A method for the therapeutic delivery *in vivo* of a bioactive agent comprising administering to a patient a therapeutically effective amount of a formulation which comprises, in combination with a bioactive agent, lipid[, protein or polymer] vesicles encapsulating a fluorinated gas, [in combination with] and bearing a targeting ligand, wherein said targeting ligand is covalently bound to said lipid vesicles via a hydrophilic polymer linking

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group. said targeting ligand targets cells or receptors selected from the group consisting of myocardial cells, endothelial cells, epithelial cells, tumor cells and the glycoprotein GPIIb/IIIa receptor and said fluorinated gas is selected from the group consisting of perfluorocarbons and sulfur hexafluoride.

C8

194. (Amended) A formulation according to Claim [101] 100 wherein said lipid vesicles comprise a phospholipid.

✓
Cancel Claims 201 and 202, without prejudice.

C9

203. (Amended) A formulation according to Claim [202] 100 wherein said hydrophilic polymer comprises polyethylene glycol.

✓
Cancel Claims 204 to 209, without prejudice.

C10

229. (Amended) A process according to Claim [114] 113 wherein said lipid vesicles comprise a phospholipid.

C11

236. (Amended) A process according to Claim [114] 113 wherein said lipid vesicles further comprise a polymer.

✓
Cancel Claims 239 to 244 and 249 to 254, without prejudice.

C12

261. (Amended) A targeted formulation according to Claim [123] 122 wherein said lipid[vesicles comprise] comprises a phospholipid.

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262. A targeted formulation according to Claim 261 wherein said phospholipid is selected from the group consisting of phosphatidylcholine, phosphatidylethanolamine and phosphatidic acid.

C13

268. (Amended) A targeted formulation according to Claim [123] 122 wherein said lipid vesicles further comprise a polymer.

✓
Cancel Claims 271 to 276, 281 to 286 and 293, without prejudice.

C14

294. (Amended) A method according to Claim [293] 127 wherein said lipid vesicles comprise a phospholipid.

✓
Cancel Claims 301 and 302, without prejudice.

C15

303. (Amended) A method according to Claim [302] 127 wherein said hydrophilic polymer comprises polyethylene glycol.

✓
Cancel Claims 304 to 309 and 330, without prejudice.

C16

331. (Amended) A method according to Claim [330] 329, wherein said lipid vesicles comprise a phospholipid.

✓
Cancel Claims 338 to 346, without prejudice.

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351. (Amended) A method according to Claim 329 wherein said targeting ligand comprises [the] a sequence selected from the group consisting of Arg-Gly-Asp and Lys-Gln-Ala-Gly-Asp-Val (SEQ ID NO 1).

Please add the following claims:

--357. A targeted formulation for therapeutic or diagnostic use comprising, in combination with a bioactive agent, lipid vesicles encapsulating a fluorinated gas, in combination with a targeting ligand, wherein said targeting ligand comprises the sequence Lys-Gln-Ala-Gly-Asp-Val (SEQ ID NO 1), and said fluorinated gas is selected from the group consisting of perfluorocarbons and sulfur hexafluoride.

358. A targeted formulation according to Claim 357 wherein said lipid vesicles are selected from the group consisting of liposomes and micelles.

359. A formulation according to Claim 357 wherein said lipid vesicles comprise a phospholipid.

360. A formulation according to Claim 359 wherein said phospholipid is selected from the group consisting of phosphatidylcholine, phosphatidylethanolamine and phosphatidic acid.

361. A formulation according to Claim 360 wherein said phosphatidylcholine is selected from the group consisting of dioleoylphosphatidylcholine,

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dimyristoylphosphatidylcholine, dipalmitoylphosphatidylcholine and distearoylphosphatidylcholine.

362. A formulation according to Claim 361 wherein said phosphatidylcholine comprises dipalmitoylphosphatidylcholine.

363. A formulation according to Claim 360 wherein said phosphatidylethanolamine is selected from the group consisting of dipalmitoylphosphatidylethanolamine, dioleoylphosphatidylethanolamine, N-succinyldioleoylphosphatidylethanolamine and 1-hexadecyl-2-palmitoylglycerophosphoethanolamine.

364. A formulation according to Claim 363 wherein said phosphatidylethanolamine comprises dipalmitoylphosphatidylethanolamine.

365. A formulation according to Claim 360 wherein said phosphatidic acid comprises dipalmitoylphosphatidic acid.

366. A formulation according to Claim 357 wherein said lipid vesicles further comprise a polymer.

367. A formulation according to Claim 366 wherein said polymer comprises a hydrophilic polymer.

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368. A formulation according to Claim 367 wherein said hydrophilic polymer comprises polyethylene glycol.

369. A formulation according to Claim 357 wherein said fluorinated gas comprises a perfluorocarbon.

370. A formulation according to Claim 369 wherein said perfluorocarbon gas is selected from the group consisting of perfluoromethane, perfluoroethane, perfluoropropane, perfluorobutane and perfluorocyclobutane.

371. A formulation according to Claim 370 wherein said perfluorocarbon gas is selected from the group consisting of perfluoropropane and perfluorobutane.

372. A formulation according to Claim 371 wherein said perfluorocarbon gas comprises perfluorobutane.

373. A formulation according to Claim 357 wherein said gas is derived, at least in part, from a gaseous precursor.

374. A formulation according to Claim 373 wherein said gaseous precursor has a boiling point of greater than about 37°C.

375. A formulation according to Claim 374 wherein said gaseous precursor comprises a perfluorocarbon.

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376. A formulation according to Claim 375 wherein said perfluorocarbon is selected from the group consisting of perfluoropentane and perfluorohexane.

377. A formulation according to Claim 357 wherein said receptors comprise the glycoprotein GPIIb/IIIa receptor.

378. A formulation according to Claim 377 wherein said targeting ligand exhibits a binding affinity (K_d) to the GPIIb/IIIa receptor of no greater than about 10^{-3} molar.

379. A formulation according to Claim 378 wherein said targeting ligand exhibits a binding affinity (K_d) to the GPIIb/IIIa receptor of less than about 10^{-3} molar.

380. A formulation according to Claim 379 wherein said targeting ligand exhibits a binding affinity (K_d) to the GPIIb/IIIa receptor of from about 10^{-9} molar to less than about 10^{-3} molar.

381. A formulation according to Claim 380 wherein said targeting ligand exhibits a binding affinity (K_d) to the GPIIb/IIIa receptor of from about 10^{-7} molar to about 10^{-5} molar.

382. A formulation according to Claim 381 wherein said targeting ligand exhibits a binding affinity (K_d) to the GPIIb/IIIa receptor of about 10^{-6} molar.

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383. A method for the therapeutic delivery *in vivo* of a bioactive agent

comprising administering to a patient a therapeutically effective amount of a formulation which comprises, in combination with a bioactive agent, lipid vesicles encapsulating a fluorinated gas, in combination with a targeting ligand, wherein said targeting ligand comprises the sequence Lys-Gln-Ala-Gly-Asp-Val (SEQ ID NO 1), and said fluorinated gas is selected from the group consisting of perfluorocarbons and sulfur hexafluoride.

384. A method according to Claim 383 wherein said lipid vesicles are selected

from the group consisting of liposomes and micelles.

385. A method according to Claim 383 wherein said lipid vesicles comprise a

phospholipid.

386. A method according to Claim 385 wherein said phospholipid is selected

from the group consisting of phosphatidylcholine, phosphatidylethanolamine and phosphatidic acid.

387. A method according to Claim 386 wherein said phosphatidylcholine is

selected from the group consisting of dioleoylphosphatidylcholine, dimyristoylphosphatidylcholine, dipalmitoylphosphatidylcholine and distearoylphosphatidylcholine.

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388. A method according to Claim 387 wherein said phosphatidylcholine comprises dipalmitoylphosphatidylcholine.

389. A method according to Claim 386 wherein said phosphatidylethanolamine is selected from the group consisting of dipalmitoyl-phosphatidylethanolamine, dioleoylphosphatidylethanolamine, N-succinyldioleoyl-phosphatidylethanolamine and 1-hexadecyl-2-palmitoylglycerophosphoethanolamine.

390. A method according to Claim 389 wherein said phosphatidylethanolamine comprises dipalmitoylphosphatidylethanolamine.

391. A method according to Claim 386 wherein said phosphatidic acid comprises dipalmitoylphosphatidic acid.

392. A method according to Claim 383 wherein said lipid vesicles further comprise a polymer.

393. A method according to Claim 392 wherein said polymer comprises a hydrophilic polymer.

394. A method according to Claim 393 wherein said hydrophilic polymer comprises polyethylene glycol.

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395. A method according to Claim 383 wherein said fluorinated gas comprises a perfluorocarbon.

396. A method according to Claim 395 wherein said perfluorocarbon gas is selected from the group consisting of perfluoromethane, perfluoroethane, perfluoropropane, perfluorobutane and perfluorocyclobutane.

397. A method according to Claim 396 wherein said perfluorocarbon gas is selected from the group consisting of perfluoropropane and perfluorobutane.

398. A method according to Claim 397 wherein said perfluorocarbon gas comprises perfluorobutane.

399. A method according to Claim 383 wherein said gas is derived, at least in part, from a gaseous precursor.

400. A method according to Claim 399 wherein said gaseous precursor has a boiling point of greater than about 37°C.

401. A method according to Claim 400 wherein said gaseous precursor comprises a perfluorocarbon.

402. A method according to Claim 401 wherein said perfluorocarbon is selected from the group consisting of perfluoropentane and perfluorohexane.

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403. A method according to Claim 383 wherein said receptors comprise the glycoprotein GPIIb/IIIa receptor.

404. A method according to Claim 403 wherein said targeting ligand exhibits a binding affinity (K_d) to the GPIIb/IIIa receptor of no greater than about 10^{-3} molar.

405. A method according to Claim 404 wherein said targeting ligand exhibits a binding affinity (K_d) to the GPIIb/IIIa receptor of less than about 10^{-3} molar.

406. A method according to Claim 405 wherein said targeting ligand exhibits a binding affinity (K_d) to the GPIIb/IIIa receptor of from about 10^{-9} molar to less than about 10^{-3} molar.

407. A method according to Claim 406 wherein said targeting ligand exhibits a binding affinity (K_d) to the GPIIb/IIIa receptor of from about 10^{-7} molar to about 10^{-5} molar.

408. A method according to Claim 407 wherein said targeting ligand exhibits a binding affinity (K_d) to the GPIIb/IIIa receptor of about 10^{-6} molar.

409. A method according to Claim 403 further comprising the administration of a sufficient amount of ultrasound energy to induce rupture of said vesicles.

410. A method according to Claim 409 wherein said glycoprotein GPIIb/IIIa receptor is associated with a thrombus.